DVIGANTSEV, V. N..

Siberia, Eastern - Grasses

Progressive practice in meadow and pasture improvement in Eastern Siberia. Dost.
sel'khoz. No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953.   UNCL.

ANTONOV, S.M.; DVIGUBSKIY, G.G.

New developer for positive films. Tekh.kino i telev. 4 no.4:45-52
Ap '60.   (MIRA 13:9)

1. Nauchno-issledovatel'skiy kinofotoinstitut "Mosfil'm."
        (Photography--Developing and developers)

DVIGUN, V M.

112-1-723

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 1, p. 120 (USSR)

AUTHORS: Dvigun, V. M., Siromakha, B. I.

TITLE: Pressing of Commutators of D-C Machinery with Plastic (Opressovka kollektorov mashin postoyannogo toka plastmassoy)

PERIODICAL: Sbornik rats. predlozheniy. M-vo elektrotekhn. prom-sti SSSR, 1955, Nr 56, pp. 4-6

ABSTRACT: A fixed cast mold is applied for the pressing of commutators with plastic; it consists of three basic parts: upper, middle and lower. The upper part consists of a punch fastened on a plate by a holder, the middle part consists of a die placed on a plate, and the lower part of a yoke and of a molding inset. Commutator plates are first molded with the micanite insulating gaskets into a ring. The ring with the plates is placed into the yoke of the casting mold. The molding operation consists of pressing the compacting powder with the punch through the gap between the ring and the die into the cavity created by the die, the molding inset and the commutator plates. The compacting powder is first pressed into briquets. The pressing is done by preheating (up to 160°) with heaters placed in the pressing tool. The pressing out of the com-

Card 1/2

Pressing of Commutators of D-C Machinery with Plastic (Cont.)   112-1-723

Card 2/2   mutator from the ring is done on a special device. The use of the
pressing tool makes possible the reduction of labor and the improve-
ment of the quality of the plastic covering of the commutator plates.
P.A.Ya.

SOV/123-59-16-68064

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 16, p 570 (USSR)

AUTHORS: Dvigun, V.M., Siromakha, B.I.

TITLE: Pressmolds for the Molding of Apertures in Pieces of Plastic Material

PERIODICAL: Byul. tekhn.-ekon. inform. Sovnarkhoz Khar'kovsk. ekon. adm. r-na, 1958, Nr 3, 14 - 17

ABSTRACT: At the Khar'kov Electro-Mechanical Plant new pressmolds were manufactured, in which the lateral punches are not any more pressed in and taken out by hand but by special hydraulic ejectors which can be easily detached and can be used on other pressmolds of the same type. The new pressmold is operating in the following way: When the two halves of the die are in a closed position the ejector is in the lower position, the lateral punches are in the outer position. The punch is lifted by the main plunger of the press. Cakes which have been preliminarily warmed up on an HF-installation are put into the receiving part of the die. When the upper plunger is lowered the lateral punches are fixed by pillars, which are fastened on the upper part of the pressmolds. After each pressing

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SOV/123-59-16-68064

Pressmolds for the Molding of Apertures in Pieces of Plastic Material

operation there is a delay of 3 - 4 minutes. At the end of the lifting stroke of the punch the automatic hydraulic ejectors are put into operation and the lateral punches are withdrawn; upon this the lower ejector is switched on and the die is lifted and opened. The described molds increase the operating efficiency, permit the pressing of long pieces and cavities at any angle and also render cheaper the cost price of the molds.

M.L.P.

Card 2/2

DVIHALLY, Zsuzsa; PONYI, Jeno

Hydrobiological conditions of the Vorosvar Valley. Hidro-
logiai kozlony 36 no.3:211-217 Je'56.

DVIHALLY   Zsuzsa

T.DVIHALLY, Zsuzsa

Seasonal changes in the chemical composition of sodic lake waters.
Hidrologiai kozlony 40 no.4:316-323 Ag '60.

1. Magyar Dunakutato Allomas, Alsogod.

HUNGARY/Cosmochemistry. Geochemistry. Hydrochemistry.   D

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42962.

Author : Dvihally Zsuzsa, Ponyi Jeno.
Inst   :
Title   : Chemical Composition and Crustacean Fauna of Salt-Marsh
          Waters in the Vicinity of the Village of Kistelek.

Orig Pub: Hidrol. kozlony, 1957, 37, No 3, 257-263.

Abstract: Study of the water of salt marshes in one of the
          districts of the Great Hungarian Plain. In chemical com-
          position 3 groups are differentiated: 1) sodium-hydro-
          carbonated; containing (mg/liter): Na^+ + K^- 7847.8-
          1082.4; Mg^{++} 0-156.6; Ca^{++} 0-15.0; CO_3^{--} 2179-2092.6;
          HCO_3^- 2047.5-14001.8; Cl^- 189.9-1369.5; SO_4^{--} 102.9-
          184.4; mineralization (M) 3898.9-25468.6; pH 9.55-10.58;

Card   : 1/2

HUNGARY/Cosmochemistry. Geochemistry. Hydrochemistry.   D

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42962.

2) magnesium-sodium hydrocarbonated: $Na^+ + K^+$ 160.9-597.1; Ca^{++} 6.6-37.4; Mg^{++} 61.6 - 139.6; CO_3^{2-} none; HCO_3^- 5.5-294.7; SO_4^{2-} 73.1-399.1; M 1120.6-2850.3; pH 7.85-8.44; 3) water of some flooded districts, of low M 689.0-2661.9; $Na^+ + K^+$ 78.5-350.4; Ca^{2+} 9.3-117.4; Mg^{2+} 33.8-264.6; HCO_3^- 511.3-1675.9; Cl^- 2.1-32.9; SO_4^- 12.9-198.5; pH 7.48-8.96.

Card   : 2/2

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T.DVIHALLY, Zsuzsa

Optical investigations in the Alsogod section of the Vac
Danube branch. Hidrologiai kozlony 39 no.5:357-364 0'59.

1. Magyar Dunakutato Allomas, Alsogod.

DVIHALLY, Zsuzsa, T.

Calculation of underwater distribution of radiant energy as a problem
of production biology. Acta biol Hung 11 no.2:77-89 '60. (EEAI 10:2)

1. Hungarian Danube Research Station, Alsogod (Head: E.Dudich)
        (WATER)   (BIOLOGY)

T. DVIHALLY, Zsuzsa

Data on the evaluation of chemical conditions of the Danube water.
Hidrologiai kozlony 43 no.3:268-271 Je '63.

VAGAS, Istvan; T.DVIHALLY, Zsuzsa

     Thoughts and proposals concerning the evaluation of chemical
conditions of the Danube water. Hidrologiai kozlony 43 no.6:
526-527 D '63.

     1. Vizgazdalkodasi Tudomanyos Kutatointezet, Budapest; "Hid-
rologiai Kozleny" szerkeszto bizottsagi tagja es rovatvezetoje
(for Vagas).

IAZERKO, G.A.; DVINIENKO, I.A.; ZARETSKIY, M.V.

Kinetics of the formation of double emmoniates. Zhur. fiz. khim. 39 no.9:2169-2174 S '65.   (MIRA 18:10)

1. Belorusskiy gosudarstvennyy universitet imeni V.I. Lenina.

DVINIKOV, L. I.; BORISOVA, Z. Yu.

"Investigation of vitreous semiconductor alloys."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad, 16-21 Mar 64.

DVININ, G.M.; MISHANSKIY, I.M.; DUBKOV, A.A.; MALAKHOVSKIY, G.F.;
DRYAGIN, P.A.; BUCHEL'NIKOV, D.V.

Working placer layers in a transverse ravine with the aid of
explosives. Prom.energ. 15 no.2:20 F '60.

(MIRA 13:5)
(Mining engineering)

DVININ I. V.

36117 Materialy po ispol'zovaniyu i Khraneniyu ugley GusinoozersKogo mestorozhdeniya Buryat-Mongol'skoy ASSR. Zapiski Buryat-Mongol. nauch.-issled. in-ta kul'tury i ekonomiki, VIII, 1948, S. 25-44.

SO: Letopis' Zhrunal' nykh Statey, No. 49, 1949

DVININ, P. A.

21932 DVININ, P. A. Massovyye skopleniya molodi lososevykh u beregov Sakhalina. Ryb. khoz-vo, 1949, No. 7, s. 39-41

SO: Letopis'Zhurnal'nykh Statey, No. 29, Moskva, 1949.

DVININ, P.A.

29178

Migratsii gorbush. u beregov Sakhalina. Ryb. Khoz-vo, 1949, No.9, s. 35-37.

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskov, 1949

DVININ, P. A.

37278. Czernyy kizhuch oneorhynchus kisutch (Walbaum) morpha relictus nova.
Doklady akad. Nauk sssr, novaya seriya, T. lxix 5, 1949, s. 695-97

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

DVININ, P. A.

Agriculture

Sakhalin salmon. Vladivostok, Izd. Tikhookeanskogo nauchno-issledovatel'skogo
instituta rybnogo khoziaistva i okeanografii, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

DVININ, P. A.; PAVLOV, I. S.

Fishes - Sakhalin

Fish reserves of the northern part of the eastern shore of Southern Sakhalin,
Ryb. khoz. 29, No. 1, 1953.

9. **Monthly List of Russian Accessions**, Library of Congress, ___May___ 1953. Unclassified.

DVININ, P.A.

Distinctive features in the biology of the Pacific salmon Oncorhynchus masu Brevoort of Sakhalin. Vop.ikht. no.7:33-35 '56.

(MLRA 10:3)

1. Tikhookeanskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva i okeanografii.

(Sakhalin--Salmon)

DVININ, P.A.

Some specific features of the young of humbacked salmon (Oncor-
hynchusgorbuscha Walbaum) at the time of their descent from the
rivers of Sakhalin to the sea. Zool.zhur. 38 no.8:1268-1269.
Ag '59.   (MIRA 12:11)

1. Sakhalin Branch of the Pacific Research Institute of Fishery
Management and Oceanography, Sakhalin Region, Tshekhov District,
Post Office of Antonovo.
            (Sakhalin--Salmon)

DVININ, V.; DRALOV, G., deviator

       Radio direction finding trainer. Mor. flot 23 no.5:15-16 '63.
                                           (MIRA 16:9)
       1. Starshiy inzh. po radionavigatsionnym priboram Azovskogo
upravleniya (for Dvinin).
           (Radio direction finders) (Nautical training schools)

DVININ, Yevgeniy Aleksandrovich; BOBROV, Yu.A., red.; YEVSEYEV, P.I.,
        tekhn.red.

        [The region we live in] Krai, v kotorom my zhivem. Murmansk,
        Murmanskoe knizhnoe izd-vo, 1959. 279 p.   (MIRA 13:6)
                (Murmansk Province--Economic conditions)
                (Murmansk Province--History)

DVININA, I.

Siberian miners' city. Mast. ugl. 7 no.8:24a-24b Ag '58.

(MIRA 11:9)

(Cheremkhovo--Description)

Dvinov, M. S.   M/S
                                                   105.22
                                                   .D9

Osnovnyye Pravovyye Voprosy Deya-tel'nosti Gosudarstvennykh Torgovykh
    Organizatsiy
(Basic Legal Questions on the Activities of State Commercial Organizations,by)

M. S. Dvinov (1 Dr.)

Moskva, Gostorgizdat, 1955

239 P. Tables.

Bibliographical Footnotes.

DVINOV, S.A., inzh.

Vibration insulating effect of the compensators of gas exhaust
pipes of internal combustion engines. Trudy LIVT no.59:38-44
'64.   (MIRA 18:10)

DVINSKAYA, LM .M:

DVINSKAYA, L. M.: "The effect of the season of the year and the amount
of work on changes in the blood composition of horses of vario s
breeds." Moscow Order of Lenin Agricultu al Academy imeni K. A.
Timiryazev. Moscow, 1956 (Dissertation for the Degree of Candi-
date in Agricultural Science)

So: Knizhnava Letopis', No. 18, 1956

L 9777-66   EWT(d)/EWT(l)/EEC(k)-2/FCC/EWP(l)/EWA(h)   IJP(c)   BB/GG/GW
ACC NR: AP5025479   SOURCE CODE: UR/0203/65/005/005/0884/0891

AUTHOR: Galkin, A. I.; Dvinskikh, N. I.

ORG: Institute of Earth Magnetism, Ionosphere, and Radiowave Propagation SO AN SSSR
(Institute zemnogo magnetizma, ionosfery y rasprostraneniya radiovoln SO AN SSSR)

TITLE: Electronic computer data processing of the vertical panoramic zoning of the
ionosphere

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 5, 1965, 884-891

TOPIC TAGS: computer technology, data processing, algorithm, ionosphere, computer
calculation

ABSTRACT: The existing methods of even a preliminary data-processing of the
vertical panoramic zoning of the ionosphere and especially the programming for
computing the N-h profiles cannot be handled judiciously by electronic computers.
An algorithm was suggested, assigning the entire task of the preliminary data-
processing to the computer. The algorithm yields a programming by virtue of which
a reliable high-frequency characteristic is obtained from the registered

Card 1/2   UDC: 550.388.2

L 9777-66
ACC NR: AP5025479

preliminary data. The time coordinates of all signals, irrespective of whether or not the signals carry useful information, are fed into the computer. The computer performs the selection of useful signals based on the analysis of the time intervals between separately registered impulses while some a priori information concerning the structure of the layers of the ionosphere is utilized. The sifting of noise and the construction of the ramification of the high-frequency characteristic are performed simultaneously. At the conclusion of the program all the smooth sections of the high-frequency characteristic are singled out, yielding the standard characteristic of the ionosphere (the altitudes of the layers and their critical frequencies). The smooth sections of the high-frequency character- istic are subsequently used for the construction of N-h profiles. The description of the program is given in operator form. Orig. art. has: 4 figures.

SUB CODE: 09,04/SUBM DATE: 11Aug64/   NR REF SOV: 004/ OTHER: 000

Card 2/2

DVINSKIKH, V. A.

Power transformer cores.   Radio no.8:51 Ag '53.

(MLRA 6:8)
(Radio--Transformers)

110-7-8/30

AUTHOR: Dvinskikh V.A. (Engineer).

TITLE: Single-phase shell-type transformers with specially wide cores. (Odnofaznye transformatory s ushirennymi serdech- nikami bronevogo tipa).

PERIODICAL: "Vestnik Elektropromyshlennosti" (Journal of the Electrical Industry, Vol.28, No.7, 1957, pp.27-30 (USSR).

ABSTRACT: Single phase shell-type transformers are widely used. Economy of materials, particularly non-ferrous, can be achieved by rational design of the transformers. In par- ticular, transformers of the shell-type in which the ratio of the width of the centre core to double the width of the outside one is less than unity serve this purpose. Cores of this kind with specially wide yokes are used in low frequency transformers and in power transformers of low output. The use of cores with wide yokes results in a cost reduction of 6 to 8%. The core section is reduced under the winding and increased elsewhere. The object of this article is to provide material for the redesign of exist- ing transformers as transformers with wide cores, maintain- ing the electrical properties, and with the greatest poss- ible economy. A formula is first derived (see appendix 1) for transformers of a power of some hundreds VA assuming

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The Determination of the Average Complex Transfer Function of
Non-Linear Quadripoles   SOV/141-58-4-26/26

quadripole and the linear quadripole in such a manner
that the modulus of the transfer function of the latter
is greater than the reciprocal of the modulus of the
complex transfer function of the non-linear quadripole.
When the above conditions are fulfilled, the system will
oscillate. The development of the oscillations is
determined by the dependence of the average complex
transfer function on the amplitude of the oscillations.
The system will become stable when the following
relationship is fulfilled:

$$\dot{K}_{sr}(A_1, \; \omega_0)\dot{\beta}(\omega) = 1 \hspace{2cm} (1)$$

where K_{sr} denotes the average complex transfer function
of the non-linear quadripole (when the oscillation
amplitude is A_1 and the frequency ω_0) and β is the
complex transfer function of the auxiliary linear
quadripole. Since β is known, Eq (1) can be used to

Card 2/3

AUTHOR: Dvinskikh, V.A.   SOV/120-59-2-35/50

TITLE: A Method of Measuring Small Non-linearities in Four-poles
             (Metod izmereniya malykh nelineynostey chetyrekhpolyus-
             nikov)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 2,
             p 120, (USSR)

ABSTRACT: A method using a sawtooth voltage and a differentiator
             has already been described in Ref 1. A non-linearity of
             0.1% can be readily detected. It is proposed that by
             closing a loop round the four-pole using an auxiliary
             four-pole of impeccable linearity and variable transfer
             function the dependence of the response of the original
             four-pole on input level can be determined. It is stated
             that using a two-mesh RC auxiliary and a MSR-47 resis-
             tance box non-linearities of 0.01% have been revealed at
             1000 c/s.

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SOV/120-59-2-35/50

A Method of Measuring Small Non-linearities in Four-poles

There is 1 English reference.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet
(Saratov State University)

SUBMITTED: March 21, 1958

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9 (2)

06355
SOV/142-2-4-8/26

AUTHOR: Dvinskikh, V.A.

TITLE: An Indirect Method of Measuring the Modulus and the
             Phase of the Mean Complex Amplification Factor of
             Quasilinear Amplifiers

ABSTRACT: The author describes an indirect method of measuring
             the modulus and the phase of the mean complex ampli-
             fication factor of quasilinear amplifiers, resonance
             amplifiers, band amplifiers, wideband amplifiers. This
             method was published by the author at the Second All-
             Union Conference on Radio Electronics, held by the MVO
             SSSR in Saratov in September 1957. For measuring the
             mean complex amplification factor, a feedback four-
             pole is used which produces self-oscillations. The
             wanted modulus and the phase are determined for the
             steady-state oscillations according to the known para-
Card 1/3   meters of the four-pole. The author establishes the

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SOV/142-2-4-8/26 ..

An Indirect Method of Measuring the Modulus and the Phase of the
Mean Complex Amplification Factor of Quasilinear Amplifiers

        connection between the amplifier parameters and the
additional four-pole, describes the regions of stable
oscillations and estimates the accuracy of the indirect
measuring method. The accuracy estimation of the indi-
rect measuring method can be performed only within the
frame of an analysis, accounting for the presence and in-
fluence of the higher harmonics. This was explained by
the author at the All-Union Scientific Session of NTOR
i E imeni A.S. Popov in Moscow in 1958. The author com-
pares measuring results obtained by the direct and in-
direct methods. The measuring results of the modulus
and the phase of the amplification factor coincide
practically with small oscillation amplitudes. The
phase values will differ from the actual values by an
essential magnitude only in case of considerable ampli-
tudes. The indirect method of measuring the modulus and
the phase of the amplifier amplification provides a
Card 2/3   simplification of the measuring circuits. The circuits

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SOV/142-2-4-8/26

An Indirect Method of Measuring the Modulus and the Phase of the
Mean Complex Amplification Factor of Quasilinear Amplifiers

for which the indirect method has been used, comprise
a very wide range of amplifiers. The author expresses
his gratitude to his supervisor V.I. Kalinin for his
interest in this work. The publication of this article
was recommended by the Department of Radio Physics of
the Saratovskiy gosudarstvennyy universitet imeni N.G.
Chernyshevskogo (Saratov State University imeni N.G.
Chernyshevskiy). There are 5 circuit diagrams, 2 sets
of graphs and 13 references, 12 of which are Soviet,
and 1 American.

SUBMITTED: January 12, 1959 (April 10, 1958)

Card 3/3

AUTHOR: Dvinskikh, V.A.   SOV/109- - -4-3-27/38
TITLE: Evaluation of the Accuracy of the Indirect Method of Phase
          Measurement (Otsenka tochnosti kosvennogo metoda
          izmereniya fazy)

PERIODICAL: Radiotekhnika i Elektronika, Vol 4, Nr 3, 1959,
          pp 534-535 (USSR)

ABSTRACT: A number of authors (Refs 1-5) proposed a method of
          measuring the phase shifts in linear quadripoles, in which
          the investigated device is connected into the circuit of
          an oscillator and the phase shift is determined
          indirectly by measuring the change in the frequency of
          the oscillator. The problem of the errors arising in this
          type of measurement is of some practical interest. These
          can be investigated by considering an oscillator with an
          LC tuned circuit in the anode and an inductive coupling
          between the anode and the grid. It is shown that, if the
          grid current and the anode resistance are neglected, the
          operation of the system can be described by the
Card 1/3 following non-linear differential equation:

SOV/109- - -4-3-27/38

Evaluation of the Accuracy of the Indirect Method of Phase
Measurement

$$\ddot{v} + \omega_o^2 v = \left[\omega_o^2 M \frac{df(v)}{dv} -- \omega_o \delta \right] \dot{v} , \qquad (1)$$

where v is the voltage at the grid, ω_o is the resonance
frequency of the circuit, δ is the damping coefficient
of the circuit, M is the mutual inductance and $df(v)/dv$
represents the dynamic slope of the anode-grid character-
istic. The solution of this differential equation can be
done by the method of a small parameter (Ref 9). For
this purpose, a notation defined by Eqs (3) and (4) is
introduced and the integration variable is defined by
Eq (5). Eq (1) can, therefore, be written as Eq (6) and
its solution is in the form of Eq (7). The zero approxi-
mation of the solution is given by Eq (9) (where M is
an arbitrary constant), while the first approximation is
expressed by Eq (11). The second approximation can be
found from Eq (15). From the above analysis it is
concluded that in order to reduce the error in the above
method of phase measurement, the investigated quadripole
should not change the form of the oscillations;

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SOV/109- - -4-3-27/38

Evaluation of the Accuracy of the Indirect Method of Phase Measurement

       in particular, the quadripole should not be in the form of a resonant circuit. Secondly, the signal of the oscillator should be the same in the presence as in the absence of the investigated network. Thirdly, if the measured network contains any non-linearities, the measurement should be carried out at the smallest possible signal voltage.

Card 3/3   There are 9 references, 3 of which are Soviet, 5 English and 1 German.

SUBMITTED: July 10, 1958

87359

S/120/60/000/004/008/...

E073/E435

9.6000 (3702, 1613, 1079)

AUTHOR: Dvinskikh, V.A.

TITLE: Noise-Immune Bridge Measuring Circuits

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.4, pp.87-88

TEXT: The author recommends using bridge circuits in which the measuring equipment is characterized by a certain reduction coefficient β (ratio of the output to the input voltage). A narrow-band amplifier is chosen whose maximum gain $K > 1/\beta$ corresponds to signals of a frequency ω.   In this case, if the sum of the phases equals zero, undamped oscillations will occur in the noninteracting closed loop: measuring part-additional amplifier.   During further balancing, while decreasing β, a sudden cessation of the oscillations will take place which can be easily recorded by means of an indicator which is switched-in to the output of the amplifier.   A bridge circuit (see the figure) based on this method contains an amplifier timed to a frequency ω_0, a balanced transformer which permits using the bridge in the case of measuring nonsymmetric loads and a calibrated phase shifter. For measuring the frequency and amplitude of the oscillations, a wavemeter and a level-indicator are used.   The amplifier, the

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S/120/60/000/004/008/028
E073/E435

Noise-Immune Bridge Measuring Circuits

transformer, the bridge and the phase shifter form a noninteracting
closed system in which undamped oscillations occur if the following
conditions are fulfilled:

Eq.
(1)

$$\left|\frac{U_{ab}}{U_{cd}}\right| < |K_{yc}(j\omega) K_{Tp}(j\omega) K_{\kappa\phi}(j\omega)| \quad (1)$$

$$\Sigma\phi = \phi_{yc} + \phi_{Tp} + \phi_{M} + \phi_{\kappa\phi} = 0, \quad (2)$$

Eq.
(2)

where K_{yc}, K_{Tp}, $K_{k\phi}$ are the transfer coefficients of the
elements of the system and ψ_{yc}, ψ_{Tp}, $\psi_{k\phi}$, ψ_{M} are the phase
shifts in these. Assuming that all elements of the system are
linear, Eq.(1) for the case of steady-state oscillations of the
amplitude A_1 and the frequency ω can be written as

Eq.
(3)

$$\left|\frac{U_{ab}}{U_{cd}}\right| = |K_{yc.~cp}(j\omega)||K_{Tp}(j\omega)K_{\kappa\phi}(j\omega)| , \quad (3)$$

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S/120/60/000/004/008/028
E073/E435

Noise-Immune Bridge Measuring Circuits

where $|K_{yc,cp}(j\omega)|$ is the modulus and the average complex gain of the amplifier for signals of the amplitude A_1 and the frequency ω. Change in the value of φ by the phase shifter ensures obtaining steady-state oscillations of the frequency ω_0. From Eq.(2) and (3) $|\dot{U}_{ab}/\dot{U}_{cd}|$ and φ_M are calculated. In view of the non-linearity of the amplifier, the phase is measured with an error (Ref.3) which decreases with decreasing oscillation amplitude. In the case of reactances, this circuit enables independent balancing for the modulus and the phase. For the measurement of pure resistances, the phase-shifter and the wavemeter can be dispensed with. The sensitivity of the measuring circuit in the case of using a multistage resonance amplifier can be such that a deviation from the balanced state corresponding to 10^{-6} to 10^{-8} absolute value of the measured resistance can be detected. In relative measurements, for instance for detecting slight changes in any element of the circuit, the sensitivity can be increased by a factor of 10 to 20, if the system is made to operate in the neighbourhood of the quench boundary of the oscillations. However,

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Noise-Immune Bridge Measuring Circuits

in this case rigid requirements have to be met relating to the
stability of all the elements of the circuit, in the first instance,
the gain of the amplifier.   On the basis of the circuit for
measuring pure resistances, a bridge with automatic balancing can
easily be realized if the level indicator is substituted by a
high-sensitivity relay.   Experiments on a bridge circuit with an
amplifier tuned to 1000 cps and having a gain of 490 have shown
that deviations from the balanced state not exceeding C.3% can be
detected.   There are 1 figure and 3 Soviet references.

(Note: This is a condensed translation.)

SUBMITTED: June 7, 1959

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S/120/60/000/004/008/028
E073/E435

Noise-Immune Bridge Measuring Circuits
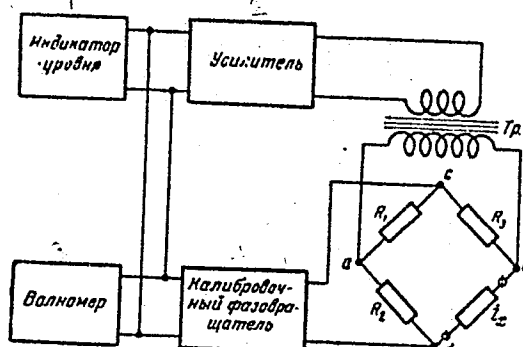
Fig.

1 - level indicator;
2 - amplifier;
3 - wavemeter;
4 - calibration phase shifter

тему, в которой возникают незатухающие колебания при выполнении условий:

Card 5/5

DVINSKIKH, V.A.

Circuits for sorting parts of electric circuits. Izm.tekh. no.10:
42-45 O'60.   (MIRA 13:10)
          (Electric circuits—Testing)

DVINSKIKH, Vasiliy Aleksandrovich; KUZ'MINOV, A.I., red.; SHIROKOVA,
    M.M., tekhn. red.

[Measuring networks with self-excitation]Izmeritel'nye skhe-
my s samovozbuzhdeniem. Moskva, Gosenergoizdat, 1962. 47 p.
                               (MIRA 15:10)
     (Electric networks)   (Electric measurements)

S/109/62/007/004/017/018
D230/D302

AUTHOR: Dvinskikh, V.A.

TITLE: On the possibility of measuring small reflections in
            self-excited systems

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 4, 1962,
            716 - 720

TEXT: This is a description of simple broadband apparatus for mea-
suring small reflection coefficients; the operation is based on the
property of self-excitation of the system. An amplifier with nega=
tive feedback, a directional coupler, attenuator and a band-pass
filter form a generator circuit. Oscillations in this generator ta-
ke place when the amplitude of reflections from the element under
test exceeds a fixed level. The instrument is capable of broadband
v.s.w.r. indication within limits 1.05 to 1.2 with an error not
less than ± 10 %; the lower limit can be reduced to v.s.w.r. = 1.02
by using precision directional couplers. In the second arrangement
proposed the band-pass filter is replaced by a narrow-band cavity
with a modulator and a monitoring oscilloscope. In this, selected

Card 1/3

On the possibility of measuring ...

S/109/62/007/004/017/018
D230/D302

parts of the region are investigated for which the reflection coef-
ficient exceeds a fixed value. A similar band-pass measuring device
can be designed using ferrite resonators. In the third method, im-
proved indication of the resonant frequency coincidence is obtained
by using phase modulation; this is achieved by appropriately modu-
lating a travelling-wave amplifier. At a frequency equal to the re-
sonant frequency of the cavity the output signal will contain only
the second harmonic of the modulator frequency to which the ampli-
fier is tuned; this system requires considerably stability of oper-
ating conditions. In practical cases, there exist usually a number
of reflections from various points in the circuit. The discrete re-
flection points are found by controlling the feedback and by vary-
ing the excitation of the single-frequency oscillation correspond-
ing to the point of reflection and maximum v.s.w.r. The discussion
includes a critical examination of the performance of the constitu-
ent components and limiting conditions affecting the reading accura-
cy of the apparatus described. There are 3 figures and 7 references:
5 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-
language publications read as follows: I.C. Dix, M. Sherry, A mi-
crowave reflectometer display system for 7500 to 1100 mc/s, Elec-
Card 2/3

On the possibility of measuring ...   S/109/62/007/004/017/018
D230/D302

tronic Engng, 1950, 31, 371, 24; W.R. Beam, D.I. Blattner, Phase angle distortion in travelling wave tubes, R.C.A. Rev., 1956, 17, 1 86.

SUBMITTED: August 7, 1961

Card 3/3

DVINSKIKH, V.A.

Plotting meters of four-pole transmission factors with
a digital reading. Priborostroenie no.12:4-5 D'63.
(MIRA 17:5)

S/109/63/008/002/024/028
D413/D508

AUTHOR: Dvinskikh, V.A.

TITLE: On the possibility of estimating the noise of a
               microwave amplifier in a self-oscillatory circuit

PERIODICAL: Radiotekhnika i elektronika, v. 8, no. 2, 1963,
               344-346

TEXT: The author describes a method for evaluating micro-
wave amplifier noise by applying suitable overall positive feedback
to induce self-oscillation; the output signal, consisting of sine-
wave plus noise, passes through a mixer and bandpass amplifier, and
the noise power level is measured with a square-law detector device,
then being compared with the level when further noise is injected
into the amplifier input. The errors of this method are discussed
in the light of I.L. Bershteyn's statistical theory (Izv. AN SSSR,
fiz., v. 14, no. 2, 1950, 145), and the choice of parameters is con-
sidered. Comparative measurements of noise factor of low-noise deci-
metric TWTs by this method and by using a superhet receiver have giv-

Card 1/2

S/109/63/008/002/024/028
D413/D308

On the possibility ...

en results differing by not more than 1.5 dB; in this work the res-
onator in the positive feedback loop had a Q of the order of 100,
and the center-frequency of the bandpass amplifier was 40 mc/s.
There are 3 figures.

SUBMITTED: February 8, 1962

Card 2/2

DVINSKIKH Vasiliy eksandrovoih; MIRSKIY, G.Ya., retsenzent;
SRETENSKIY, V.N., retsenzent; GOLOVANOVA, L.V., red.

[Measurement of the parameters of amplifiers using a self-
excitation mode] Izmereneie parametrov usilitelei s prime-
neniem rezhima samovozbuzhdeniia. Moskva, Sovetskoe radio,
1965. 231 p.   (MIRA 18:3)

DVINSKIKH, V.A., kand. fiziko-matem. nauk

Measuring capacitances of capacitor pickups in a self-excited
bridge circuit. Priborostroenie no.5:3-5 My '65.

(MIRA 18:5)

L 3018-66   EWT(d)/EWT(1)/EEC(k)-2/EWA(h)

| AM5013194 | BOOK EXPLOITATION | UR/ | |
| | | 621.375:621.317.6 | |

Dvinskikh, Vasiliy Aleksandrovich

Use of self-oscillation methods in measuring amplifier parameters (Izmereniye
  parametrov usiliteley s primeneniyem rezhima samovozbuzhdeniya) Moscow, Izd-vo
  "Sovetskoye radio" 1965. 231 p. illus., biblio. 7500 copies printed.

TOPIC TAGS: self oscillation, measuring measurement, amplifier parameter measure-
  ment, gain measurement, phase shift measurement, characteristic measurement, noise
  factor measurement, auxiliary feedback, quasi linear amplifier, power output
  measurement, nonlinearity measurements

PURPOSE AND COVERAGE: This book is intended for engineers and technicians con-
  cerned with testing vacuum-tube and semiconductor amplifying elements. It may
  also be useful for radio specialists working in this field and for students
  taking courses in related fields at schools of higher technical education.
  Methods of measuring basic amplifier parameters, such as gain, power output,
  noise factor, harmonic distortion factor, and input-output amplitude character-
  istics are discussed. It is shown that in a majority of practical cases (in-
  cluding automatic control), these parameters can be measured by converting the

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L 3018-66
AM5013194   8

amplifier being tested into a state of self-excitation by means of an auxiliary-
feedback circuit. Methods used in the noise factor measurement of quasi-linear
amplifiers operating in a self-excitation state and acting as the superheterodyne
of a superheterodyne receiver are also described. The author thanks G. Ya.
Mirskiy, V. N. Sretenskiy, R. A. Valitov, N. S. Iofin, S. V. Kukarin, A. S.
Koshelov, I. M. Kulik and Z. E. Dvinskikh for their work in preparation of the
book.

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AM5013194

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AM5013194

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AM5013194

5. Automation of noise factor control of quasi-linear amplifiers -- 224

Bibliography -- 226

SUB CODE: EC   SUBMITTED: 21Jan65   NO REF SOV: 069

OTHER: 016

Card 5/5

DVINSKIY, Em.

Secret of the winding machine designed by Egorov. Izobr.i rats.
no.2:58-59 F '60.   (MIRA 13:8)
(Winding machines)

1. DVINSKIY, Ye.

2. USSR (600)

4. Coal-Mining Machinery

7. Soviet mining technology. Znan. sila, no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February   1953. Unclassified.

USSR/Human and Animal Physiology. Digestion. The Stomach.   T-7

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55712.

Author : Dvinyakov, L.I.
Inst   : Institute of Physiology. Academy of Sciences USSR.
Title   : Secretion Characteristics of the Lesser and Greater
          Stomach Curvatures in Imaginary Feedings of Dogs
          After Esophagotomy.

Orig Pub: Tr. In-ta fiziol. AN SSR, 957, 6, 498-508.

Abstract: After esophagotomy has been performed on dogs with
          stomach fistula and with ventricles severed from
          the lesser and greater curvatures, an imaginary
          feeding (IF) of bread, meat, or milk effected a
          secretion of acid gastric juice from only the
          lesser curvature ventricle. The greater curvature

Card   : 1/2

97

USSR/Human and Animal Physiology. Digestion. The Stomach.   T-7

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55712.

            ventricle secreted mucus only, without HCl being
            liberated. In imaginary feedings of dogs who were
            kept on a meat or carbohydrate and milk diet, the
            lesser curvature secretion and acidity were larger
            than in dogs who were kept on a mixed diet. After
            IF the latent secretion period of the lesser curva-
            ture did not change, but the latent secretion period
            of the greater curvature increased. In some cases
            of dogs with ventricles severed from the lesser
            curvature and from the pyloric section, IF did not
            effect secretion, not even the secretion of the
            lesser curvature. After IF with meat, carbolic
            cholin (0.25 ng injected into the stomach) increased
            secretion, acidity, and the digestive capacities
            of gastric juice in all dogs. After IF, secretion

Card   : 2/3

AUTHORS: Alekseyev, N.F., Yakobson, L.G., Dvinyanina, N.,   32-3-12/52
              Lavrent'yeva, N.N.

TITLE: The Accelerated Analysis of Mixtures Containing Ammonia and
              Methylamine (Uskorennyy analiz smesey, soderzhashchikh ammiak
              i metilaminy)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 3, pp. 283-287 (USSR)

ABSTRACT: A method of determination was worked out which was developed from
              three differnet methods. One of them is the chromatographic
              analysis according to Fuks and Rappoport /Ref. 3/. From a hydro-
              chloric acid solution three samples are taken. In the first
              sample dimethylamine is determined polarographically or by hydrazine-
              method. In the second sample the hydrochlorides of ammonia and
              monomethylamine are treated with butanol and chloroform. The third
              sample serves for the chromatographic determination of trimethyl-
              amine. Should the solution contain less than 0.25 g/l ammonia,
              determination of ammonium chloride cannot be carried out with
              butanol but, according to Leon/Ref. 2/, by a precipitation with

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The Accelerated Analysis of Mixtures Containing
Ammonia and Methylamine   32-3-12/52

sodium cobaltinitrite. The extraction of trimethylamine in
chromatographic determination is carried out, instead of with
butanol, with benzene according to Gerber and Hildi /Ref. 9/ ,
as in this way a better separation is attained. Chromatographic
determination was carried out in a mixture of starch and calcium
oxide with bromothymol blue. Titration is carried out with a
0.02-0.05n sulphuric acid solution. The accuracy attained satis-
fied the demands made by industry and analysis is said to take
three hours. There are 2 tables, and 9 references, 5 of which are
Slavic.

ASSOCIATION: Kemerovo Nitrogen Fertilizers Plant (Kemerovskiy azotno-tukovyy
zavod)

AVAILABLE: Library of Congress

1. Ammonium compounds-Analysis   2. Methylamine compounds-Analysis
3. Butanol-Applications   4. Chloroform-Applications

Card 2/2

DVINYANINOV, A.V.; YANKOVSKAYA, Ye.I.

Calculating the influence of relief on wind velocity in planning
electric power transmission lines. Sbor. rab. Kuib. gidromet.
obser. no.1:5-37 '64.   (MIRA 17:12)

GAVRILOV, F.F.; BEZEL', V.S.; DVINYANINOV, B.L.; KNYAZYUK, L.V.,
inzh., retsenzent; DUGINA, N.A., tekhn. red.

[Safety measures in X-ray defectoscopy] Bezopasnost' rabo-
ty rentgenologa pri defektoskopii. Moskva, Mashgiz, 1963.
77 p. (Biblioteka kontrolera-mashinostroitelia, no.8)
(MIRA 16:10)

(X rays--Safety measures)

L 2723-66   EWT(1)/EPA(s)-2/EWT(m)/T/EWP(t)/EWP(b)/EWA(c)   IJP(c)   JD/JG/GG

ACCESSION NR: AP5017194   UR/0139/65/000/003/0175/0175

AUTHORS: Shul'gin, B. V.; Gavrilov, F. F.; Dvinyaninov, B. L.

TITLE: Dielectric constant of single crystals of lithium hydride

SOURCE: IVUZ. Fizika, no. 3, 1965, 175

TOPIC TAGS: lithium compound, dielectric constant, crystal lattice structure, crystal lattice vibration

ABSTRACT: To determine the wavelength of the natural oscillations of the LiH lattice, the authors measured the dielectric constant of transparent crystals with average dimensions 8 x 4 x 1 mm. Under the influence of light, the crystals soon assumed a blue color. The dielectric constant was measured with a capacity meter at 500 kcs and 23C. The value of the dielectric constant was found to be 10.5 ± 0.26. The accuracy of the method was checked by determining the electric constant of Zn, Sn, and LiF which agreed with the published data. The wavelength obtained for the natural vibrations of the LiH lattice is

Card   1/2

L 2723-66
ACCESSION NR: AP5017194   3

$\lambda = 56.5 \times 10^{-4}$ cm. Orig. art. has: 1 table.

ASSOCIATION: Ural'ski politekhnicheskiy institut imeni S. M. Kirova
(Ural Polytechnic Institute)

SUBMITTED: 11Jul64   ENCL: 00   SUB CODE: SS, EM

NR REF SOV: 004   OTHER: 002

Card 2/2

L 15565-66   EWT(1)/EWT(m)/EWP(t)/EWP(b)   IJP(c)   JD/JG

ACC NR: AP6004407

AUTHOR: Dvinyaninov, B. L.; Gavrilov, F. F.

ORG: none

TITLE: Color centers in lithium hydride

TOPIC TAGS: absorption spectrum, single crystal, lithium compound, ionic hydride, color center, alkali halide

ABSTRACT: The optical absorption spectra of lithium hydride are studied as a function of time of exposure to light. Single crystals were grown by slowly cooling a melt of hydrated lithium. Unfiltered light from a mercury tube was used for preliminary exposure of the crystals. All crystals showed a strong absorption band in the 2400 Å region. This band is probably due to F-centers. This is the only absorption band observed in pure undyed crystals of lithium hydride. As exposure time is increased, a new maximum in the absorption spectrum is observed in the 3600 Å region. The F-band is also somewhat broadened. The crystals take on a smoked color which is

Card 1/2

L 15565-66

ACC NR: AP6004407

gradually intensified to complete opacity. The absorption spectrum for these crys-
tals stretches throughout the entire visible region. The most intense coloring is
observed in the surface layer when the crystals are exposed from one side. This is
probably due to absorption of the light in the crystal. Bands were also observed
with absorption maxima at 5400, 7000 and 95000 Å. A qualitative analysis of these
spectra shows that the bands are due to the formation of color centers as in alkali
halide crystals. These bands are most clearly observed in crystals contaminated by
metal impurities, but they are also seen in pure crystals. Theoretical calculations
are compared with experimental data for the wavelengths at various color centers.
The results show that color centers in lithium hydride have spectral characteristics
similar to those in alkali halide crystals. In conclusion the authors are grateful
to L. A. Mal'tsev who assisted in making some of the measurements. Orig. art. has:
4 figures, 1 table.

SUB CODE: 20/ SUBM DATE: 28Jul64/ ORIG REF: 000/ OTH REF: 008

Card 2/2

ACC NR: AT7001714   SOURCE CODE: UR/2694/65/000/143/0059/0061

AUTHOR: Shul'gin, B. V.; Gavrilov, F. F.; Dvinyaninov, B. L.

ORG: none

TITLE: Concerning F-centers in LiF crystals

SOURCE: Sverdlovsk. Ural'skiy politekhnicheskiy institut. Trudy, no. 143, 1965. Atomnaya i molekulyarnaya fizika (Atomic and molecular physics), 59-61

TOPIC TAGS: lithium fluoride, color center, absorption spectrum, hyperfine structure, epr spectrum, ionization spectrum

ABSTRACT: The purpose of the investigation was to estimate theoretically what changes in the widths of the hyperfine splitting lines can be expected in the case when the F-centers in LiF crystals are in a state where they form weak associations, rather than being in a state of isolated defects. The analysis is based on comparison of experimental results on the EPR absorption spectrum of the F-centers in LiF crystals, produced by ionizing radiation, and similar results obtained for KCl. From a plot of the F-center exchange-interaction frequency against the distance between F-centers it is deduced that narrowing down of the hyperfine interaction lines in the EPR spectra of LiF crystals should be observed at distances on the order of four lattice constants between F-centers. This corresponds to an F-center concentration $\sim 10^{21}$ cm^{-3}, which agrees with experimental data. The estimated change in the line width is by a factor approximately 1.28. This means that if the width of the hyperfine inter-

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ACC NR: AT7001714

action in LiF state is 14 gauss, as published in the literature, then in the initial
state it should be 18 gauss. Appropriate experiments are needed to confirm this
value. Orig. art. has: 1 figure and 6 formulas.

SUB CODE: 20/   SUBM DATE: 00/   ORIG REF: 001/   OTH REF: 007

Card   2/2

ACC NR: AT7001715   SOURCE CODE: UR/2694/65/000/143/0067/0070

AUTHOR: Leshchenko, Yu. I.; Kirsanov, V. V.; Dvinyaninov, B. L.

ORG: none

TITLE: Operation of the EG-2.5 in a mode in which proton and deuteron beams are used simultaneously

SOURCE: Sverdlovsk. Ural'skiy politekhnicheskiy institut. Trudy, no. 143, 1965. Atomnaya i molekulyarnaya fizika (Atomic and molecular physics), 67-70

TOPIC TAGS: electrostatic accelerator, proton beam, deuteron beam, neutron reaction/ EG-2.5 electrostatic accelerator

ABSTRACT: The authors report tests performed in 1960-1963 on the electrostatic accelerator EG-2.5 of the Electrophysics Laboratory of the Ural Polytechnic Institute, using a proton beam and a beam of deuterons with energy up to 1.5 Mev. The beams were used both separately and simultaneously. The desired end result was to obtain two beams that are close in magnitude and of sufficient intensity. This was done by filling the source with a mixture of hydrogen and deuterium. The deuteron beam was obtained by using the reaction $Be^9(d, n)B^{10}$. In the case when both beams were simultaneously used, one beam was deflected by a magnetic analyzer through $90°$, and the second was deflected $45°$. To determine the feasibility of using both beams simultaneously, the compositions of the ion beam were investigated when the ion source was fed with hydrogen, deuterium, or a mixture of the two. When the source was fed with

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ACC NR: AT7001715

hydrogen, the resultant H_2^+ beam could be used to stabilize the voltage of the generator. When the source was fed with deuterium, the deutron beam was fed to the target at 45°, and a small beam of protons went to the ion channel (10% of the total ion current). When the source operated with the mixture, the proton beam in the ion channel was 40% of the total ion beam. At the same time, the target received at an angle of 45° a beam of H_2^+ and D_1^+, the latter ranging from 40 - 60% of the total. The generator voltage could be stabilized with either of the two latter beams. Prolonged operation of the EG-2.5 as a neutron generator with simultaneous use of the proton beam demonstrated the advisability of feeding the generator source with a mixture of hydrogen and deuterium. Orig. art. has: 2 figures and 3 formulas.

SUB CODE: 18, 20/   SUBM DATE: 00/   ORIG REF: 001

Card 2/2

ACC NR: AP7004981   SOURCE CODE: UR/0048/66/030/009/1487/1489

AUTHOR: Dvinyaninov,B.L.; Gavrilov,F.F.

ORG: none

TITLE: Dynamics of the formation of some color centers in lithium hydride /Report,
Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga,
16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no.9, 1966, 1487-1489

TOPIC TAGS: lithium compound, hydride, absorption spectrum, single crystal, color
center

ABSTRACT: The authors have recorded absorption spectra of LiH crystals grown slowly
from the melt and have investigated the effects on the absorption of ultraviolet
irradiation and changes in the conditions under which the crystals were grown. All
the crystals were transparent in the visible and had a very strong absorption band
in the 220-260 mμ region. Rapid cooling during crystal growth or the presence of
an excess of lithium in the melt resulted in a broadening of this band. Irradiation
with low intensity 253 mμ radiation resulted first in a partial bleaching of this
band and splitting of the band into two bands. After further irradiation the ab-
sorption again increased and the two component bands merged. These results are re-
garded as favoring the hypothesis that this band is due to absorption by F centers

Card 1/2

ACC NR: AP7004981

rather than to exciton absorption. Ultraviolet irradiation gave rise also to other absorption bands in the LiH crystals. The crystals that contained an excess of lithium or that were cooled rapidly during growth behaved similarly to LiH:Mg crystals. The growth under ultra violet irradiation of the 655 mμ absorption band due to colloidal lithium was different, depending on whether a given ultraviolet dose was received over a long time interval from a weak source, or was delivered rapidly from a strong source; the peak of the absorption band occurred at a shorter wavelength when the ultraviolet dose was received rapidly than when it was received slowly. From this it is concluded that the formation of colloidal lithium in LiH crystals involves a stage in which color centers are produced. Orig. art. has: 2 figures.

SUB CODE: 20   SUBM DATE: none   ORIG. REF: 002   OTH REF: 005

Card 2/2

ACC NR: AP7007711   SOURCE CODE: UR/0139/67/000/001/0069/0073

AUTHOR: Shul'gin, B. V.; Gavrilov, F. F.; Dvinyaninov, B. L.;
Koryakov, V. I.; Chirkov, A. K.

ORG: Ural Polytechnic Institute imeni S. M. Kirov (Ural'skiy politekh-
nicheskiy institut)

TITLE: Paramagnetic resonance of irradiated lithium hydride luminescent
crystals

SOURCE: IVUZ. Fizika, no. 1, 1967, 69-73

TOPIC TAGS: luminescent crystal, activated crystal, absorption line,
electron paramagnetic resonance, lithium compound, hydride, temperature
dependence, color center

ABSTRACT: The dependence of the intensity and width of the absorption
line of the EPR on temperature was investigated in irradiated
lithium hydride luminescent crystals. The irradiation was done at room
temperature with the unfiltered light of an SVD-120 mercury lamp and
betatron electrons with energies of 8 to 10 Mev. The temperature
dependence of the intensity and width of the EPR absorption line of LiH
crystals with blue luminescence undergoes a sharp change in the
temperature range from 90 to 120°C. The first maximum on the thermo-
luminescence curve is also observed in this range. This coincidence

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ACC NR: AP7007711

occurs because the centers of the electron capture in LiH responsible
for the first thermoluminescence peak are bound with the colloidal
lithium. The release of electrons from the capture level corresponding
to the first thermoluminescence peak causes the elimination of these
absorption centers. As a result, the intensity of the paramagnetic
absorption line decreases and the width increases due to the absorption
by the color cneters. The authors thank M. Lemberberg who participated
in the investigation of the optical absorption spectra of LiH. Orig. art.
has: 3 figures.   [JA] [WA-95]

SUB CODE: 20/ SUBM DATE: 03Aug67 OTH REF: 003

Card   2/2

DVINYANINOV, L.I.

DVINYANINOV, L.I.

Analysis of neural regulation of gastric secretory areas. Trudy
Inst. fiziol. 3:86-104 '54.
(MLRA 8:2)

1. Laboratoriya fiziologii i patologii pishchevareniya i krovoobra-
shcheniya. Zaveduyushchiy A.V.Solov'yev.
(GASTRIC JUICE,
    secretion, neural regulation)
(AUTONOMIC NERVOUS SYSTEM, physiology,
    regulation of gastric secretion)

DVINYANINOV, L.I.

Role of the nervous system in secretory function of the stomach following prolonged feeding with one type of food. Trudy Inst. fiziol. 3:105-126 '54.   (MLRA 8:2)

1. Laboratoriya fiziologii i patologii pishchevareniya i krovoobra-shcheniya. Zaveduyushchiy A.V.Solov'yev.
            (GASTRIC JUICE,
                secretion, vagus regulation)
            (NERVES, VAGUS, physiology,
                regulation of gastric secretion)

T

USSR/Human and Animal Physiology. Thermoregulation.

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93052.

Author : Dvinyaninov, L.I.
Inst   :
Title   : Development of Fever Reaction in Birds (Comparative
          Pathology of Fever).

Orig Pub: V sb.: Fiziol. mekhanizmy likhoradochn. reaktsii, L.,
          Medgiz, 1957, 75-89.

Abstract: The consumption of oxygen (CO) in hens prior to
          infection by a culture of Pasteurella avium was
          constant. Changes in the body temperature (BT)
          and CO after infection developed in 3 stages. In
          the first stage (duration $7 - 10\frac{1}{2}$ hours) BT did not
          change, but CO was somewhat lowered in some of the
          hens, and in others it increased; in the second

Card   : 1/3

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USSR/Human and Animal Physiology. Thermoregulation.   T

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93052.

stage (2 - 10$\frac{1}{2}$ hours) BT increased in all the hens
(0.5 - 1.1%), and CO diminished (18%); in the third
stage (1 - 6 hours) BT was lowered, and CO fell
(40%), and the hens died. In other experiments
hens were infected with an injfection of a pneumo-
coccus culture. Development of a fever reaction,
sometimes delayed, was noted. An elevation of BT
more often correlated with a lowering of CO. Conse-
quently, both with infection by a definitely patho-
logical culture and also after introduction of a
weakly virulent culture, a transitory elevation of
the body temperature was observed, and simultaneously,
in most of the cases, a lowering of CO. In experiments
in infected hens as well as in hens which were running

Card   : 2/3

USSR/Human and Animal Physiology. Thermoregulation.

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93052.

temperatures, CO was significantly increased ($1\frac{1}{2}$ -
2 times) after introduction of α-dinitrophenol.
This increase was maintained for 4 - 6 hours and then
fell, although BT still remained high or even con-
tinued to increase. --- F.I. Muraladze.

Card   : 3/3

23

DVINYANIMOV, L.I.

Features of secretion of the lesser and greater curvature of the
stomach during simulated feeding of esophagostomized dogs. Trudy Inst.
fiziol. 6:498-508 '57.   (MIRA 11:4)

1. Laboratoriya fiziologii i patologii pishchevnreniya i krovo-
obrashcheniya (zaveduyushchiy A.V. Solov'yev).
          (STOMACH--SECRETIONS)

DVINYANINOV, L.I.

Secretory characteristics of the lesser and greater.curvature;
in experimental gastritis produced by repeated-irrigations of the
stomach with hot water. Trudy Inst. fiziol. 7:422-430 '58 (Mira 12:3)

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